

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A dye-sensitized solar cell, comprising:
a first substrate having a light-transmitting property;
a laminate unit stacked on the first substrate, the laminate unit having a semiconductor electrode containing a sensitizing dye and arranged in such a manner that a first surface of the semiconductor electrode comes in contact with faces the first substrate; a first collector electrode arranged on a second surface of the semiconductor electrode; an insulating layer arranged in contact with the first collector electrode; a catalytic electrode layer arranged in such a manner that a first surface of the catalytic electrode layer faces the insulating layer; and a second substrate arranged on a second surface of the catalytic electrode layer; and
an electrolyte material incorporated in the semiconductor electrode, the first collector electrode and the insulating layer.
2. (original): The dye-sensitized solar cell according to claim 1, wherein the second substrate is made of ceramic and/or metal.
3. (previously presented): The dye-sensitized solar cell according to claim 1, wherein the semiconductor electrode is prepared from titanium oxide.
4. (currently amended): The dye-sensitized solar cell according to claim 1, wherein the first collector electrode is in the form of a porous layer with a porosity of 2 to 40%.

5. (previously presented): The dye-sensitized solar cell according to claim 1, wherein the first collector electrode has a planar configuration in a grid pattern, comb pattern or radial pattern.

6. (previously presented): The dye-sensitized solar cell according to claim 1, further comprising a second collector electrode between the second substrate and the catalytic electrode layer.

7. (original): The dye-sensitized solar cell according to claim 6, wherein the second collector electrode has a planar configuration in a sheet form or in a grid pattern, a comb pattern or a radial pattern.

8. (new): The dye-sensitized solar cell according to claim 1, wherein the first collector electrode is prepared from tungsten.

9. (new): A dye-sensitized solar cell, comprising:

a first substrate having a light-transmitting property;

a laminate unit stacked on the first substrate, the laminate unit having a semiconductor electrode containing a sensitizing dye and arranged in such a manner that a first surface of the semiconductor electrode faces the first substrate to leave a space therebetween, a first collector electrode arranged on a second surface of the semiconductor electrode, a catalytic electrode layer arranged in such a manner that a first surface of the catalytic electrode layer faces the first collector electrode, an insulating layer arranged between the first collector electrode and the catalytic electrode layer and a second substrate arranged on a second surface of the catalytic electrode layer; and

an electrolyte material incorporated in the semiconductor electrode, the first collector electrode and the insulating layer and filled in the space between the first substrate and the first surface of the semiconductor electrode.

10. (new): The dye-sensitized solar cell according to claim 9, wherein the first collector electrode is in the form of a porous layer with a porosity of 2 to 40%.

11. (new): The dye-sensitized solar cell according to claim 9, wherein the first collector electrode has a planer configuration in a grid pattern, comb pattern or radial pattern.

12. (new): A method for manufacturing a dye-sensitized solar cell, comprising:
providing a first substrate having a light-transmitting property;
producing a laminate unit in which a semiconductor electrode containing a sensitizing dye, a first collector electrode, an insulating layer, a catalytic electrode layer and a second substrate are arranged in order of mention;

stacking the substrate unit onto the first substrate in such a manner that the semiconductor electrode faces the first substrate; and

incorporating an electrolyte material throughout the semiconductor electrode, the first collector electrode and the insulating layer.

13. (new): The method according to claim 12, wherein the laminate unit is produced by laminating the catalytic electrode layer, the insulating layer, the first collector electrode and the semiconductor electrode on the second substrate sequentially in order of mention.